WEATHER RULES FOR SAFE BOATING

Before setting out:

Obtain the latest available weather forecast for the boating area. The NOAA Weather Radio continuous broadcasts (VHF-FM) are the best way to keep informed of expected weather and sea conditions. If you hear on the radio that warnings are in effect, don't venture out on the water unless you are confident your boat can be navigated safely under forecast conditions of wind and sea.

While affoat:

- Keep a weather eye out for: the approach of dark, threatening clouds, which may foretell a squall or thunderstorm; any steady increase in wind or sea; any increase in wind velocity apposite in direction to a strong tidal current. A dangerous rip tide condition may form steep waves capable of broaching a boat.
- Check radio weather broadcasts for latest forecasts and warnings. 3. Heavy static on your AM radio may be an indication of nearby
- thunderstorm activity.
- 4. If a thunderstorm catches you while affoat, you should remember that not only gusty winds but also lightning poses a threat to safety. - stay below deck if possible.
- keep away from metal objects that are not grounded to the boat's protection system.
- don't touch more than one grounded object at the same time for you may become a shortcut for electrical surges passing through the protection system).
- put on a life jacket and prepare for rough sea conditions.

NOAA WEATHER RADIO BROADCASTS

CITY	STATION	FREQUENCY	BROADCAST TIMES
Bay City, TX	WWG-40	162,425 MHz	Continuously, 24 hrs a day
Beaumont, TX	WXK-28	162,475 MHz	Continuously, 24 hrs a day
Brownsville, TX	WWG-34	162.55 MHz	Continuously, 24 hrs a day
Corpus Christi, TX	KHB-41	162.55 MHz	Continuously, 24 hrs a day
Galveston, TX	KHB-40	162.55 MHz	Continuously, 24 hrs a day
Houston, TX	KGG-68	162.40 MHz	Continuously, 24 hrs a day
Lake Charles, LA	KHB-42	162.40 MHz	Continuously, 24 hrs a day
Lafayette, LA	WXK-80	162.55 MHz	Continuously, 24 hrs a day
Morgan City, LA	KIH-23	162.475 MHz	Continuously, 24 hrs a day
Victoria, TX	WXK-34	162,40 MHz	Continuously, 24 hrs a day

These VHF-FM radio stations, locations shown on the map, are managed by the National Weather Service. Broadcast tapes are updated every 3 to 6 hours and amended as required. Broadcast contents vary, but in general contain the following types of information.

- 1. Descriptions of the weather patterns affecting the southern part of the United States.
- 2. Regional and state forecasts with outlook for the third day. Marine forecasts and warnings for coastal waters.
- 4. Weather observations from selected National Weather Service and Coast Guard stations.
- 6. Local weather observations and forecasts.
- 7. Watches, warnings, statements and bulletins concerning adverse and severe weather.

RADIO WWV/WWVH STORM INFORMATION BROADCASTS

HIGH SEAS STORM INFORMATION for the North Atlantic and North Pacific is provided mariners through a cooperative program of two Department of Commerce agencies: the National Weather Service of the National Oceanic and Atmospheric Administration and the National Institute of Standards and Technology. Bulletins are compiled by the National Weather Service and broadcast every hour by the National Institute of Standards and Technology's Frequency and Time Broadcast Services Radio Stations - WWV, Fort Collins, Colorado and WWVH, Kauai, Hawaii. These are the radio stations that sailors and others listen to for daily time checks.

WWW (FORT COLLINS, CO) FREQUENCIES: 2.5, 5, 10, 15, 20 MHz

The weather broadcast is in 45-second segments separated by a 15-second interval.

TIMES OF BROADCAST	BROADCAST AREA		
8 minutes past the hour	Storm information for western North Atlantic		
9 minutes past the hour	including Gulf of Mexico and Caribbean Se		

BROADCASTS OF MARINE WEATHER FORECASTS AND WARNINGS BY MARINE RADIOTELEPHONE STATIONS

City	Station	Frequency, kHz/MHz	Broadcast times (local) CST
Mobile,	NOQ	~ CH 22A	0420, 0620, 1020, 1620
AL	(USCG)	^# 2670 kHz	0420, 0620, 1020, 1620
New Orleans,	NMG	~ CH 22A	0435, 0635, 1035, 1635
LA	(USCG)	^# 2670 kHz	0435, 0635, 1035, 1635, 235
	51 20115	NAVTEX(G) 518 kHz	0100, 0500, 0900, 1300, 170
			2100
Galveston,	NOY	~ CH 22A	0450, 0650, 1050, 1650
TX	(USCG)	^# 2670 kHz	0450, 0650, 1050, 1650
Corpus Christi,	NOY-8	~ CH 22A	0440, 0640, 1040, 1640
TX	(USCG)	^# 2670 kHz	0440, 0640, 1040, 1640

USCG VHF broadcasts normally contain coastal forecasts. HF broadcasts normally contain offshore forecasts. Marine warnings are broadcast upon receipt.

- * Broadcast 1 hour later during Daylight Saving Time.
- ^ Preceded by announcement on 2182 kHz
- ~ Preceeded by announcement on ch. 16.
- # Single Sideband, suppressed carrier, carrier frequency.

SAFETY RULES FOR SMALL BOAT OPERATORS

- Never leave shore without an approved life preserver for each person aboard.
- 2. Check the weather before departure. Leave an itinerary of your trip with a responsible individual.
- 3. Equip your vessel with safety flares...know how to use them...replace outdated items.
- 4. Know the limitations of yourself, your crew, and your vessel. Do not leave unprotected waters in small boats when severe weather is occurring or is forecast.
- 5. If your vessel cannot reach a safe harbor prior to the arrival of severe weather...close all hatches, keep all unnecessary crew below and away from grounded metal objects. Sailing vessels should reduce sail immediately and be prepared to change course to head into possible strong outflow winds produced by thunderstorms.
- 6. Navigation is crucial particularly for the Gulf of Mexico where shoal waters, reefs, and obstructions abound. Research your trip thoroughly and prepare an approach route to your harbor.
- 7. Learn the rules of navigation...they may save your life. Never cross bows of large commercial vessels or barges.
- 8. It is often safer to remain offshore than to attempt to to enter unfamiliar shallow waters or harbors at night or during periods of reduced visibility.

SCHEDULE OF MARINE PRODUCTS FOR RADIO FACSIMILIE REVISED 21 OCT 1997

THE TROPICAL PREDICTION CENTER IN MIAMI, FLORIDA PROVIDES MARINE INFORMATION FOR THE GULF OF MEXICO, THE CARIBBEAN SEA AND THE TROPICAL ATLANTIC OCEAN. PRODUCTS INCLUDE: HIGH SEAS FORECASTS (12 - HOURLY WITH 6 - HOURLY AMENDMENTS), VARIOUS ANALYSES AND FORECASTS OF WINDS, SEAS, TROPICAL WEATHER SYSTEMS, FRONTS, AND GOES - 8 SATELLITE IMAGERY (AVAILABLE 6 - HOURLY).

THESE AND OTHER TROPICAL PREDICTION CENTER/NATIONAL HURRICANE CENTER PRODUCTS ARE ALSO AVAILABLE VIA INTERNET ADDRESS: http://www.nhc.noaa.gov/

TRANSMISSION	PRODUCT DESCRIPTION	TRANSMISSION	PRODUCT DESCRIPTION
TIMES (UTC)		TIMES (UTC)	
0000	1800 UTC TROPICAL SURFACE ANALYSIS	1200	0600 UTC TROPICAL SURFACE ANALYSIS
0030	24/36 HR GULF WIND/SEAS FORECAST/(2 CHARTS)	1230	24/36 HR GULF WIND/SEAS FORECAST/(2 CHARTS)
0050	2200 UTC HIGH SEAS FORECAST	1250	1000 UTC HIGH SEAS FORECAST
0115	1800 UTC GULF SURFACE ANALYSIS	1315	0600 UTC GULF SURFACE ANALYSIS
0135	1800 UTC U.S. SURFACE ANALYSIS	1335	0600 UTC U.S. SURFACE ANALYSIS
0150	2345 UTC GOES - 8 TROP SAT IMAGE	1350	1145 UTC GOES - 8 TROP SAT IMAGE
0205	## REQUEST FOR COMMENTS ##	1405	## PRODUCT NOTICE BULLETIN ##
0600	0000 UTC TROPICAL SURFACE ANALYSIS/(2 CHARTS)	1800	1200 UTC TROPICAL SURFACE ANALYSIS/(2 CHARTS)
0630	## RADIOFAX PRODUCT SCHEDULE ##	1830	## RADIOFAX PRODUCT SCHEDULE ##
0650	0400 UTC HIGH SEAS FORECAST	1850	1600 UTC HIGH SEAS FORECAST
0715	0000 UTC GULF SURFACE ANALYSIS	1915	1200 UTC U.S. SURFACE ANALYSIS
0735	0000 UTC U.S. SURFACE ANALYSIS	1935	1200 UTC U.S. SURFACE ANALYSIS
0750	0545 UTC GOES - 8 TROP SAT IMAGE	1950	1745 UTC GOES - 8 TROP SAT IMAGE
0805	## REBROADCAST OF 0030 UTC WIND/SEAS FORECAST ##	2005	## REBROADCAST OF 0030 UTC WIND/SEAS FORECAST ##

SIMULTANEOUS BROADCAST FREQUENCIES FROM UNITED STATES COAST GUARD STATION (NMG) NEW ORLEANS, LOUISIANA ARE: 4317.9 kHz 8503.9 kHz

SELECT A CARRIER FREQUENCY 1.9 kHz BELOW THOSE LISTED WHEN USING A SINGLE SIDEBAND RADIO IN USB. MODE TO RECEIVE THESE BROADCASTS.

ADDITIONAL INFORMATION CAN BE OBTAINED BY CALLING 305-229-4470.

PLEASE ADDRESS COMMENTS TO: CHIEF TAFB

TROPICAL PREDICTION CENTER, 11691 SW 17TH STREET MIAMI, FL 33165-2149.

EXPLANATION OF ADVISORIES/WARNINGS

SMALL CRAFT ADVISORY: Issued to alert mariners to sustained (more than two hours) weather or sea conditions, either present or forecast, that might be hazardous to small boats. Boaters/mariners will be able to receive the Small Craft Advisory by keeping tuned to a NOAA Weather Radio Station or the Coast Guard and commercial radio stations that transmit marine weather information. The threshold conditions for the Small Craft Advisory are usually based on 25 knots of wind or hazardous wave conditions. Decision as to the degree of hazard will be left to the boat operator, based on experience and the size and type of boat. There is no legal definition of the term "small craft".

GALE WARNING: Issued to indicate winds within the range of 34 to 47 knots are either present or forecast for the area.

STORM WARNING: Issued to indicate winds of 48 knots or above, no matter how high the speed, are either present or forecast for the area.

of brief duration is imminent and is not covered by existing warnings or advisories. TROPICAL STORM WARNING: Issued to indicate winds within the range of 34 to

63 knots are either present or forecast in conjunction with a tropical cyclone.

SPECIAL MARINE WARNING: Issued whenever a severe local storm, or strong wind

HURRICANE WARNING: Issued to indicate winds 64 knots or more are either present or forecast for the area in conjunction with a tropical cyclone.

NOTE: A "TROPICAL STORM WATCH" or "HURRICANE WATCH" is issued whenever a tropical storm or hurricane becomes a threat to a coastal area. The "WATCH" is not a warning, but indicates that the tropical cyclone is near enough that persons in the area covered by the "WATCH" should listen to their radios for subsequent advisories and be ready to take precautionary action in case tropical storm or hurricane warnings

INTERNET ADDRESSES

National Weather Service Current Weather Data http://www.nws.noaa.gov

National Data Buoy Center http://seaboard.ndbc.noaa.gov

U.S. Coast Guard Navigation Center http://www.navcen.uscg.mil

National Weather Service Southern Region Headquarters http://www.srh.noaa.gov

National Weather Service Marine Products http://www.nws.noaa.gov/data.shtml#mar

National Weather Service Radiofax Products http://weather.noaa.gov/fax/marine.shtml

MARINE RADIOFACSIMILE CHARTS THROUGH E-MAIL

National Weather Service radiofax charts broadcast by the U.S. Coast Guard from Point Reyes, CA are available via E-mail. It is anticipated that the service will include marine text products in the near future. This allows Internet access for mariners who do not have direct access to the World Wide Web, but who are equipped with an E-mail system. Users can request files from NWS and have them automatically E-mailed back to them. To get started, send an E-mail to:

> Address: ftpmail@weather.noaa.gov Subject: (not required) Body:

Direct any questions to 301-713-1677, extension 128, or 301-713-0882, extension 122.

ACAB, AUGUST 1998

OTHER MARINE WEATHER SERVICES CHARTS AVAILABLE

MSC-1 Eastport, ME to Montauk Point, NY Mexican Border to Point Conception, CA MSC-2 Montauk Point, NY to Manasquan, NJ MSC-9 Point Conception, CA to Point St. George, CA MSC3 Manasquan, NJ to Cape Hatteras, NC Point St. George, CA to Canadian Border MSC-4 Cape Hatteras, NC to Savannah, GA MSC-11/12 Great Lakes MSC-5 Savannah, GA to Apalachicola, FL MSC-13 Hawaiian Waters MSC-6 Apalachicola, FL to Morgan City, LA MSC-7 Morgan City, LA to Brownsville, TX Puerto Rico and Virgin Islands MSC-14 MSC-15 Alaskan Waters Guam and the Northern Mariana Islands

MSC-16

Nautical charts for navigation purposes for these coastal areas are available from local marinas, marine supply stores, and the address below. Copies of these charts are available for \$1.25 each from: National Ocean Service Distribution Division (N/ACC33) Riverdale, MD 20737 Telephone: 1-(800)-638-8972

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